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Europe - Mr. Federico Corradini, President CEMA European Committee of Agricultural Machinery Manufacturers Associations

Ladies and Gentlemen, good morning.

My name is Federico Corradini, my role is President of CEMA, the European Committee of Agricultural Machinery Manufactures Associations, and my task today is to inform you about the current and future agricultural and agricultural mechanization scenarios in the EU.

Quite a not easy task, let me say, since the wide social, economical and structural differentiations yet existing among the 27 Member States of the EU have a deep impact on the whole European agricultural world.

Well, I'll try to do my best.

I have first of all to thanks European Commission, UNACOMA and VDMA as sources for many data and information of the presentation.

Let's start "flying" over Europe to have a global look to the agricultural sector, shooting some spot picture on current situation and trying to figure-out future evolution.

Agriculture in the EU-27

Agriculture in the EU-27 is undertaken in 172 million hectares, that's approximately 40% of the territory.

With 61% of the utilised agricultural area, or UAA, dedicated to seed crops.





The productive fabric is comprised of about 14.2 million farms, including a very large number of small farms.

Indeed the average size of a European farm is 12.1 ha UAA per farm, though in the 12 New Member States the size is significantly smaller: 5.6 ha per farm.

This figure is clearer if we look at the two ends of the complete picture.

Agricultural holdings with agricultural area < 5 ha were about 10.34 million in 2005, while in the same year agricultural holdings with agricultural area > = 50 ha were only about 690.000.

Still in 2005, total farm labor force, including everyone (over the legal age limit) having provided an agricultural work on and for the holding during

the last 12 months, was about 12.7 million AWUs, where one AWU equals the work of a full-time employee.

In the chart you can see that one of the distinctive features of European agriculture is its aging population.

If we consider only agricultural holders, in 2005 the ones below 35 years old were about 956.000 versus about 4.72 million being over or equal 65 years old.

Agricultural contractors play a very important role in Europe. They not only contribute in generating value, but also allow smaller farmers to take advantage of the latest technologies and machines, without the need to purchase them.

Another important characteristic of the European agriculture sector is its extensive integration with food industry. In fact, the EU food industry acquires and transforms around 70% of internal agricultural production.

The value of agricultural production in 2005 was €327 billion; stable at €326 billion in 2006, it is estimated to have reached €351 billion in 2007.

A very good news

From a general point of view, livestock, fruits and vegetables, and commodities are the most important contributors to generated value.

Once more, the above statistics do not reveal the differences that exist within the EU. While the largest share of Agriculture added value is produced in the EU-15, 85% of total in the 12 New Member Countries the Agricultural sector plays an even more important role compared to the total of EU, both in terms of total added value (8.5% versus 1,9%) and particularly of employment, with 20.1% versus 6% of overall labour.

In a medium to long-term perspective, however, Central and Eastern Europe show far more dynamic development trends than the rest of Europe, due to modernisation and restructuring processes that involve their entire economy.

For this reason, countries belonging to these regions will progressively make a larger contribution to the European Agri-food sector, leading to its further overall strengthening.





In response to the increasing segmentation of the consumer market in Europe, organic production has also developed more than a niche.

Organic land area in Europe accounts in fact for 3.9% of total utilised agricultural area.

Besides the fundamental role of producing primary resources for food consumption, and more recently for non-food uses, such as biofuels production, agriculture and farmers, are requested to more and more perform other important functions:

- Environmental protection (landscape preservation, protection of hydro-geological resources, biodiversity and natural habitats),
- Forestry preservation and promotion,
- Rural population inflows (rural tourism, preservation of agricultural culture and traditions
- Protection of animal health and welfare.

And much more.

A part of this ongoing process, that is consistent with the development path outlined by the EU CAP reform, can be seen for example in the steady increasing number of agricultural holdings with another gainful activity than agricultural production: from 2003 to 2005, the percentage of this kind of holdings out of the total quite doubled (from 6,2% to 12%).

The Agri-food trade balance

The EU is the world's largest importer and exporter of agricultural products, being its share in total world exports about 20%.

In 2006, trade in agricultural raw products and food accounted for some 5% of the total EU-27 trade in goods with extra-EU-27 countries.

Over the course of the last few years, the overall agri-food trade balance has improved somewhat: the deficit, in fact, declined from €4.3 billion to €3.0 billion but in order to better understand the structure of the trade balance, it is essential to compare agricultural raw materials trade with processed products trade.

In fact, the EU-27 is a net importer of primary agricultural products, with a global trade deficit of about €17 billion in this category and a net exporter of processed food products, with a global trade surplus of about €14 billion.

Agricultural prices on the rise

After about 20 years of price decline, the current surge in agricultural prices is mainly due to





Structural factors:

- Gradual rise in global food demand
- New markets, such as bio-fuels
- A slow down in yield productivity in the EU and an overall incapacity of major exporting countries to keep pace with demand growth
- Significant restructuring in the EU farm sector towards greater competitiveness driven by CAP reform (dairy sector)
- Agricultural markets: thin market and slow adjustment capacity

Short-term factors:

- Series of adverse climatic conditions
- Behavior of some exporting countries
- Impact of investment funds on commodity markets

Will it last?

Many of structural factors are expected to keep sustaining market prices over the medium term, but not at the exceptional levels recently observed.

Main markets perspectives

Let's take a look to some of the main markets in terms of future perspectives.

- Positive medium-term perspectives for EU cereal production taking into account the emerging bio-ethanol market.
- Positive perspectives on oilseed markets.
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- Positive, though modest perspectives for EU meat markets, with EU to reduce production and to remain net importer of beef.
- Positive trend for pig meat production and consumption but with growth rates expected to be lower than in the 90s.
- EU poultry consumption to grow at a faster rate than production over the medium term.
- Medium term perspective appear positive for EU dairy markets mainly thanks to the increase in demand for cheese and other value-added dairy products
- EU milk production constrained by quota with declining dairy herd size.





Farm income perspectives

After a sharp expansion after 1992, farm income has been stagnating over many years.

2007 went very well and medium-term perspectives are relatively favorable, notably in the New Member States.

but many uncertainties remain, including:

- Potential implications of a (multilateral) trade agreement
- Future development of world markets
- Economic and policy environment
- Climate change, technological developments, bio-fuels, sanitary conditions And in addition the increasing bill for chemical, fuel and new machinery (that will reflect in their price the rise in cost of steel and components) will have a negative impact in the farm margin.

Agricultural mechanization

The equipment fleet

The total tractor fleet in EU-27 counted for 9.300.200 units in 2006

The average tractor age in some countries is 25 years.

That means a lot of obsolete old tractors in terms of technological features, environmental impact and operators' safety.

And the scenario is quite the same if we take into consideration harvesting equipment and other agricultural machines.

The progressive ageing of the fleet, contributed in stimulating the demand for new tractors.

But the demand for new equipment is due more to the necessity of having and exploiting new kinds of machines/technologies, rather than to the farmers' will to replace old, faithful, traditional machines.





In fact, with the introduction of the new CAP, European agriculture underwent a period of radical restructuring, by dropping the idea of maximizing production and accepting a cost reduction and product quality enhancing logic.

In this new scenario, agricultural mechanization plays a double role:

- Allowing smaller and specialized/niche products farms to reach high quality levels as to enable farmers to increase their added value,
- Allowing larger farms to reduce their production costs, in order to let them better face international price-based competition.

The role and economic weight of the domestic mechanization industry

In 2006, the total value of tractors and agricultural machines production in EU-27, reached 21.3 billion euros, 92,6% of which generated into the EU-15 area.

Thanks to farmers' bigger resources availability, the demand for agricultural machinery in EU-27 has reached quite high levels, with the need for modernization of the new EU members as a major driver.

As a matter of fact, the agricultural machinery market in these countries has grown in 2006 by 19%.

In 2006, imports of machinery accounted for 2.1 billion euros in value; while home market sales value was 19.1 billion euros, with a 7% increase over 2005.

On the exports side, same year, 21% of the total agricultural machines volume produced in the EU-27 was exported, generating a value of 4,5 billions euros, and being USA, Canada, Russia, Belarus, South Korea, Japan and China, the main export markets.

Taking a look to tractors registrations in Europe, they reached about 166.000 units in 2007, up by 1,57% compared to 2006.

Evolution of the demand for agricultural machines

Beside each market's peculiarities, determined by specific renewal cycles and by local agricultural production state, 2007 has been marked in average by a good sales trend, tied to the positive evolution of the European agricultural sector's profitability. But, what's next?

Let's some forecasts and perspectives, taking into consideration the 3 main sectors: tractors, combines and hay and forage equipment.

<u>Tractor Europe TIV evolution</u>





After a good 2007, 2008 is expected to even better but in the medium term the future overall trend is considered to slightly decrease having EU 27 and EU 15 give different contribution to EU Tractor TIV.

Cereal demand for Bio-fuel production increase and high and increasing maize demand worldwide, that should particularly favor European export, will contribute to more favorable conditions for investments into large crop production in Hungary, Bulgaria and Romania. In fact the machinery market trend is slightly decreasing for the EU15 members while is growing for the new members states

When You look the tractor TIV per HP segmentation it is interesting to note the clear trend to move forward bigger and powerful machines.

The EU agricultural labor input trend that keeps falling down in line with the restructuring of the agricultural sector, the area under arable crops that has increased from 65 million hectares in 2006 to 77 million hectares in 2008, and the average dimension of EU agricultural exploitation that keeps increasing especially in the new Member States, are contributing to High power machine market increase.

Combines Europe TIV evolution and medium term projection

Global cereal demand increase, has driven the market in 2007 and today. The trend will decrease in medium terms.

As per the tractor, is clearly visible the growing contribution in the market of the New Member states.

Other H&H Europe TIV evolution and medium term projection

Major H&H includes: Round Balers, Large square Balers and Self propelled Forage Harvesters

The market will not react positively as the tractors and combine market

European agriculture legislative framework

The role of the CAP

The multi-functionality of agriculture and rural development are currently the main objectives of the European agricultural system's development. Starting from the CAP Reform of 2003 (the so called Fischler Reform), this approach has been repeatedly confirmed and expanded, and today imposes a reduction in the financial resources destined for the CAP through 2013.

The European authorities have addressed the above-mentioned change process by introducing several new instruments.





Certainly, the most important of these is the single farm payment independent of production level (decoupling), which will likely make farmers more competitive and market-oriented than in the past.

In addition, a very significant role has been assigned to the issue of "cross-compliance". Support payments will be linked to:

- The respect of environmental and food safety,
- Animal and plant health and animal welfare standards,
- The requirement to maintain farmland in good agricultural and environmental condition.

Very recently on May 20th, some new adjustments to European agricultural policy have been proposed:

- Abolishing set-aside rules requiring arable farmers to leave 10% of land fallow
- Phasing out milk quotas by one percent per year from 2009-13
- Simplifying the link between subsidies and environmental, animal welfare and food quality standards
- More flexible support for sectors with special problems
- Moving some direct aid into rural development, to support renewable energy, water management and biodiversity and measures to address climate change
- Ending market intervention in certain areas so farmers can respond more quickly to market trends

Besides EU policies, some European countries have their own support policy.

Currently, Spain, with the exception of the Basque regions that have their specific local policies, is running a program aimed at the renewal of the agricultural fleet for the period 2006-2008.

In Italy, the most recent regulations concerning agricultural machinery "scrapping" were adopted in years 1998/1999 and 2001/2002.

Germany runs regional programs that can vary from region to region.

In general terms, Eastern Europe countries rely more on EU support that has a big influence on agricultural machinery sales.





The role of technical legislation

Off road emission legislation

The European legislative framework, that provides for a progressive and drastic reduction of the polluting substances emitted by the engines, is in an advanced phase of application and it's going to deal with limits involving the adoption of the most sophisticated means available from the new anti-pollution technologies.

This well know slide gives an idea of the magnitude of the task comparing the 2014 requirements versus 2000 limits.

The legislation covers a long period. For this reasons, moments of technical review and confrontation, at the European Commission level, are provided for in order to evaluate the state of the art of the technological evolution and to adjust both the limits and application procedures.

I particularly would like to mention a couple of very important points:

- the possibility to exempt some categories of specialized tractors from the application of the next Tier levels in order maintain their working mission
- adequate flexibility levels, enabling manufacturers to cope with the following emissions stages, compatibly with the production process and supply chain needs.

Operator's safety

Operators' safety, be they the drivers or people involved into the production and processing phases, is another key issue.

A huge amount of activity is in development, in the legislation and the standardization fields, in order to give a sure answer to the more and more stringent demands that come from all the involved bodies: Governments, Health and safety and Category Association. I would like to underline, the frame Directive about tractors that, keeps into consideration trailers and implements in order to guarantee safer road traffic and the Machine Directive, recently updated, that affects all agricultural machines, means to impose and to guarantee greater levels of safety in through the entire machines' operating life.

Roading requirements

In line with the machinery evolution, particularly tractors, there is a lot of activity in order to update the legislation and standardization to deal with higher road speed and new braking requirements.





Research and Innovation for agricultural mechanization

European agriculture's evolution towards a more and more qualitative and environmental-friendly model, impacts on the demand for mechanization.

The market trend is oriented towards specialized equipment, featuring high technology and optimized for specific usages and cultivations.

At the same time, we can see an increase in the average level of power and an expansion, in the top end of the range, towards models of greater dimensions and power.

Development activities are also focused on designing completely new machines that can help agriculture even in the smallest niche productions in order to perform multifunctional activities, in a more rational and profitable way, according to the European agricultural model.

In addition to the legislation the other main driver for investing in innovation, is the natural competition on the market, or better, the will of agricultural machinery manufactures, who want to provide their customers with products featuring advanced solutions in terms of greater safety, efficiency, comfort and versatility.

Here are some examples of the current trends.

Comfort and ease of driving

- Even lower noise levels, inside the cab and in the surrounding environment. In order to reach these targets, major improvements are continuously in progress on all agricultural machines' components: engine, transmission, hydraulic, cab, and so on.
- Vibrations level reduction. Manufacturers are widely introducing advanced suspension systems for axles and cabs, as well as driver seat suspensions featuring active control
- Auto-guidance systems: based on the reception of GPS signals to help the steering system control
- Introduction of a greater quantity of servo-assisted controls, in order to improve ergonomy and to increase precision and effectiveness
- Continuously variable transmissions (CVT) with electronic management, for optimizing speed according to specific agricultural operations
- Standard ISOBUS for tractor-implement communication, enabling greater automation of implement operations and a better graphic interface for a co-ordinate management of the job

Efficiency and productivity improvement

- Precision farming: soil mapping enables a targeted use of production activities, resulting in more productivity and lower environmental impact
- Telematics: wireless vehicle-to-vehicle communication. Wireless communication between vehicles, implements, farms and dealers allows a more efficient fleet management and faster maintenance operations





- Field and road functions programming: so called automated headland routines to let operator concentrate more on driving than on the actuation of multiple controls
- Fuel consumption reduction: through optimized matching between transmissions and mechanical / hydraulic components. Engine and transmission mapping integration depending on the scheduled operation

Opportunities linked to renewable energy sources

Tests are being carried out on fast growing trees, with short cut intervals, in order to satisfy the always-increasing demand.

Harvesting equipment's special features, such as high-density balers, are introduced in order to minimize transportation costs or to allow cutting and processing of fast-growing trees

At the same time, mechanization for the management of the forest biomasses for energetic uses is quickly developing, and important projects are carried out on the production of biogas from animal manure.

Bio-fuels

Agricultural equipment and engine manufacturers trough intensive research and tests, are now ensuring that all the engine and fuel system components can work with standardized biodiesel, blended at different percentage till 100%.

Other research is now concentrated on possible usage of 100% pure vegetable oil as a fuel.

Specialization of agricultural equipment

Electronics is entering all agricultural sector, in particular fruit growing, asking for more and more sophisticated systems, in order to guarantee both product quality and costs control. Robotics will be the next step, especially in the area of quality selection and product packaging at the field.

Conclusions

Or better a summary of this quite long presentation, I hope not so boring for You.

Having always in mind the peculiar situations that EU has country by country it is possible to identify some general trend as conclusion of the presentation.

The more and more important contribution that the new state members will have in the European agricultural GVA due to their higher growth rate versus the EU 15, has to be underlined.

The evolution process of European Agriculture is strongly influenced by many other factors and political and social expectations:

 The CAP reform is assigning new directions for competitiveness and requiring environmental friendly production and food safety connected to payments





- The evolution of the food global demand for quantity and the more specific European request for high quality, bio-food, and specialized products, will continue
- The non food demand for Bio-energy (Bio-fuels and Biomass) will grow but the increasing rate will be affected by the current debate on the competition versus agri-food production
- The growing attention of the social community to the other important functions of agriculture such as landscape and forestry preservation, protection of biodiversity and natural habitats, and the promotion of rural tourism that represents an additional gainful activity

The increase of the agricultural prices of the last two years will be sustained by the structural factors presented before that will substantially continue their impact on the medium term, but not at exceptional levels recently observed

The agricultural income is expected to maintain the gain of the recent years and will grow on the new Member States.

The total arable area will take advantage from the new approach in set aside. Farm average size will keep increasing while the total holdings number will decline.

The new product demand in agricultural mechanization will be driven by:

- Safe and friendly working environment for the machine operators
- More powerful and big equipment to increase productivity
- New specialized and dedicated machinery to respond to environmental, food safety and higher quality requests
- More specialized machinery and dedicated implements for the non-food production
- Replacement of old equipments to improve efficiency and income

The agricultural machinery sale trends in the medium term period will be sustained by the income perspective and new product demand, but in terms of volume for the main equipments like tractor and combine the TIV will be stable or decline versus the pick achieved in 2008.

The new product evolution, with more powerful and high technological content, will more than compensate in term of total value.

To respond to safety and comfort issues for farmers, to the new product request for "intelligent" farming, and to perform sometimes even better than the more and more stringent environment regulations, the Agricultural machinery Industry is putting a lot of





efforts and attention to innovate their products and to develop new ones, as we have seen before.

As we said we are in the middle of a very important change in farming.

The European farmers are currently facing an evolving and challenging situation that make them feel uncertain to some extent but that gives them a lot of opportunity to improve and to renew the way they do business in agriculture.

The European Agricultural Machinery Industry has the know-how and the capacity to supply them the right equipments and to support the European farmers to successfully manage their future farming business.

Thank You



